

**In the Claims:**

1. (Currently Amended) A method for performing admission control in order to offer assurances on forwarding quality in networks comprising the steps of:

setting a threshold for each link where said threshold defines a maximum sum of forwarding resources requested by applications for their application data flows, ADFs, on the link;

calculating a measurement level, the measurement level being a rate lower than the threshold;

repeatedly measuring, during usage, multiplexing properties of the aggregated ADFs on each link, wherein the measuring begins when a reservation level exceeds the measurement level ~~reaches a rate that is lower than the maximum sum of forwarding resources~~, each measuring being performed over a period of time;

dynamically adapting ~~a level of~~ said threshold by utilizing the measured multiplexing properties of the ADFs on each link and by utilizing knowledge about the forwarding resources of the links, and recalculating the measurement level based on the dynamically adapted threshold; and

preventing an overload before it occurs by controlling admission to each link based on the dynamically adapted threshold.

2-4. (Canceled)

5. (Previously Presented) The method according to claim 1, further comprising setting an initial threshold for each link.

6. (Previously Presented) The method according to claim 5, characterized by choosing the initial threshold by estimating multiplexing properties of different ADFs off-line, said estimation being based on results from preparatory tests of recorded samples of ADFs, which are expected on a link and use this estimation when choosing the level of said threshold.
7. (Previously Presented) The method according to claim 5, characterized by performing the measurements at at least two different rates.
8. (Previously Presented) The method according to claim 7, characterized by measuring at a first rate, which is equal to or lower than an amount of allocated resources on the link and measuring at a second rate, which is lower than the first rate.
9. (Previously Presented) The method according to claim 8, wherein the second rate is dependent on reserved resources on the link and the threshold.
10. (Previously Presented) The method according to claim 8, characterized by  
increasing the threshold when both the measurement at the first and second rates indicate lower loss-rates than what is assured;  
decreasing the threshold when both the measurement at the first and second rates indicate higher loss-rates than what is assured; and  
maintaining the threshold when the measurement at the second rate indicates a higher loss-rate than assured and the measurement at the first rate indicates a lower loss-rate than assured.

11. (Previously Presented) The method according to claim 5, characterized by introducing a measurement threshold, which defines a level of forwarding capacity reservations on the link above which the measurements are initiated.
12. (Previously Presented) The method according to claim 11, characterized by increasing the measurement threshold in steps but not over a predefined maximum level which is lower than a level of allocated resources of the link when the measurement at the second rate indicates a higher loss-rate than assured and the measurement at the first rate indicates a lower loss-rate than assured.
13. (Previously Presented) The method according to claim 8, characterized by measuring at a third rate, which is higher than the first rate but equal to or lower than the allocated resources of the link when the measurement at the first rate indicates a higher loss-rate than assured, the loss-rate measured at the third rate being indicative of if it is necessary to pre-empt ADFs from the link or if it is enough to prevent new ADFs from entering the link.
14. (Previously Presented) A node in a network comprising software for performing admission control in order to offer assurances on forwarding quality in networks and software for setting a threshold for each link, said threshold defining a maximum sum of forwarding resources requested by applications for their application data flows, ADFs, on the link, characterized in that said node further comprises software for performing the method in claim 1.
15. (Previously Presented) A node in a network according to claim 14, characterized in that it comprises or is connectable to a measuring means adapted to perform measurements on the links.

16. (Previously Presented) A computer program product directly loadable into the internal memory of a processing means within a computer placed in a node, the computer program product being embodied in a medium readable by the computer, wherein the medium readable by the computer comprises a software code means for performing the steps of claim 1.

17. (Previously Presented) A computer program product embodied in a computer-readable medium, the computer-readable medium comprising a readable program for causing a processing means to control an execution of the steps of claim 1.

18-30. (Canceled)

31. (Currently Amended) A device for performing admission control in order to offer assurances on forwarding quality in networks, the device comprising:

means for setting a threshold for each link where said threshold defines a maximum sum of forwarding resources requested by applications for their application data flows, ADFs, on the link;

means for calculating a measurement level, the measurement level being a rate lower than the threshold;

means for repeatedly measuring, during usage, multiplexing properties of the aggregated ADFs on each link, wherein the measuring begins when a reservation level exceeds the measurement level ~~reaches a rate that is lower than the maximum sum of forwarding resources,~~ each measuring being performed over a period of time;

means for dynamically adapting a level of said threshold by utilizing the measured multiplexing properties of the ADFs on each link and by utilizing knowledge about the forwarding resources of the links and for recalculating the measurement level based on the

dynamically adapted threshold; and

means for preventing an overload before it occurs by controlling admission to each link based on the dynamically adapted threshold.

32. (Previously Presented) The device of claim 31, further comprising means for setting an initial threshold for each link.

33. (Previously Presented) The device of claim 32, further comprising means for choosing the initial threshold by estimating multiplexing properties of different ADFs off-line, said estimation being based on results from preparatory tests of recorded samples of ADFs, which are expected on a link.

34. (Previously Presented) The device of claim 32, further comprising performing the measurements at at least two different rates.

35. (Previously Presented) The device of claim 34, further comprising means for measuring at a first rate, which is equal to or lower than an amount of allocated resources on the link and for measuring at a second rate, which is lower than the first rate.

36. (Previously Presented) The device of claim 35, wherein the second rate is dependent on reserved resources on the link and the threshold.

37. (Previously Presented) The device of claim 35, further comprising,  
means for increasing the threshold when both the measurement at the first and second rates indicate lower loss-rates than what is assured;

means for decreasing the threshold when both the measurement at the first and second rates indicate higher loss-rates than what is assured; and

means for maintaining the threshold when the measurement at the second rate indicates a higher loss-rate than assured and the measurement at the first rate indicates a lower loss-rate than assured.

38. (Previously Presented) The device of claim 32, further comprising means for introducing a measurement threshold, which defines a level of forwarding capacity reservations on the link above which the measurements are initiated.

39. (Previously Presented) The device of claim 35, further comprising means for increasing the threshold in steps but not over a predefined maximum level which is lower than a level of allocated resources of the link when the measurement at the second rate indicates a higher loss-rate than assured and the measurement at the first rate indicates a lower loss-rate than assured.

40. (Previously Presented) The device of claim 35, further comprising measuring at a third rate, which is higher than the first rate but equal to or lower than the allocated resources of the link when the measurement at the first rate indicates a higher loss-rate than assured, the loss-rate measured at the third rate being indicative of if it is necessary to pre-empt ADFs from the link or if it is enough to prevent new ADFs from entering the link.